

N° 22,821



A.D. 1910

Date of Application, 3rd Oct., 1910

Complete Specification Left, 1st Apr., 1911—Accepted, 25th May, 1911

PROVISIONAL SPECIFICATION.

Improvements in and relating to Spirit Levels.

We, WILLIAM JONES SALISBURY, Devonshire Road, Altrincham, Cheshire, Joiner and Builder, and ARTHUR BOARDMAN, 78, Victoria Road, Hale, Altrincham, Joiner and Builder, do hereby declare the nature of this invention to be as follows:—

5 This invention relates to spirit levels and plumbing instruments used on buildings, the object being to provide a level, simple in construction, and easily adjusted, and to render the tube less liable to breakage in consequence of shocks it is liable to in use.

10 The level consists of a base of sheet metal, stamped and pressed to a channel section, and provided with apertures through the sides for side observation of the bubble; a portion of the spare metal from the said apertures being turned inward to form a support for the top plate. The spirit tube is supported between blocks of rubber, the ends of the tube fitting into the said blocks. The top plate is provided with apertures for observing the bubble, and extends
15 longitudinally over the said blocks and tube. The said top plate is secured to the base by two adjusting screws which pass through the blocks. A second spirit tube may be fixed at right angles to the base for plumbing purposes.

To adjust the level one adjusting screw may be tightened, to depress the end of the tube which is highest, the rubber block being compressed between the
20 top plate and base, until the level is "correct".

Dated the 1st day of October, 1910.

WILLIAM JONES SALISBURY.
ARTHUR BOARDMAN.

COMPLETE SPECIFICATION.

25 Improvements in and relating to Spirit Levels.

We, WILLIAM JONES SALISBURY, Joiner & Builder, 11, Devonshire Road, Altrincham, & ARTHUR BOARDMAN, Joiner & Builder, 78, Victoria Road, Hale, Altrincham, Cheshire, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and
30 ascertained in and by the following statement:—

This invention relates to spirit levels and plumbing instruments, used chiefly on buildings, the objects being, to provide a level simple in construction, easily adjusted, and to render the tube less liable to breakage in consequence of shocks it is liable to in use.

35 The level consists of a base of sheet metal of channel section, two rubber blocks formed to receive the ends of the spirit tube, the spirit tube being supported between the blocks: a top-plate, or shield, extending longitudinally over the tube & blocks, adjustably secured to the base by two adjusting screws, the blocks being held between the top-plate & base: adjustment of the tube
40 being effected by the screws compressing the lower portion of the blocks under the seatings of the tube,

[Price 8d.]



Salisbury and Boardman's Improvements in and relating to Spirit Levels.

A second spirit tube fixed at right angles to the base may be provided for plumbing.

In order to clearly illustrate the invention we append a sheet of drawings:—

Fig. 1 is a longitudinal section of the level.

Fig. 2 is a cross section through A. B Fig. 1.

Fig. 3 is the plan.

Fig. 4 is a part longitudinal section of a level provided with second spirit tube for plumbing.

Fig. 6 is part plan of Fig. 4.

Fig. 5 is a section through C. D Fig. 4.

In Figs. 1, 2, & 3, A is the base or stock stamped out of sheet metal, pressed into channel section & trued on the underside, the top edges true & parallel to the bottom.

Apertures C are formed in the sides for side observation of the bubble. The base is dished at the points *i* where the adjusting screws *h. h.* enter, to prevent the ends of the screws descending below the true lower surface of the base. *b. b.* are rubber blocks formed to receive the ends of the spirit tube E. We prefer to secure the ends of the tube in the blocks with a suitable cement, to prevent the tube turning in its seatings. Grooves *n* are formed on the underside of the blocks to allow either end of the tube to be easily depressed on adjustment. F is the top-plate which extends longitudinally over the blocks & spirit tube: Suitable apertures are provided for observing the bubble from above or through the apertures. *h. h.* are the adjusting screws which secure the top-plate to the base, & effect the adjustment of the spirit tube by compressing, or allowing the lower part of the blocks to expand, thus depressing, or elevating either end of the tube as desired.

In Fig. 4 is shown a level having a second spirit tube for plumbing purposes. The base *a* is made of sufficient depth to receive the second spirit tube *l*: apertures *c1* & *c2* are made in the sides for observing both tubes from the sides: the portions *d* are turned inward to fit in the notches *g*, in the top-plate *f*, to prevent any longitudinal movement of the top-plate. The shield K having apertures for observing the second tube, partly encloses the blocks *b1* between which is supported the spirit tube *l*.

This shield is held in position by the extension *j* of the top-plate, & the screw *m* slight adjustment of the tube being effected by means of this screw. The base could be cast if desired.

Having now particularly described and ascertained the nature of our said invention, and in what manner the same is to be performed, we declare that what we claim is:—

I. An improved spirit level, having the spirit tube supported between blocks of elastic material, a shield or top-plate extending longitudinally over the said blocks & tube, adjustably secured to the base by screws substantially as and for the purpose hereinbefore described.

II. In a spirit level, the combination of a base of channel section containing a spirit tube supported between blocks of elastic material, and a shield or top-plate extending longitudinally over the blocks & tube, adjustably secured to the base by screws substantially as and for the purpose hereinbefore described.

III. An improved spirit level having the construction as shown in Figs. 1, 2, 3, 4, 5, & 6 of the accompanying drawings.

Dated the 30th of March, 1911.

WILLIAM JONES SALISBURY.
ARTHUR BOARDMAN.

A.D. 1910. Oct. 3. N: 22,821.
SALISBURY & another's COMPLETE SPECIFICATION.

(1 SHEET)

[This Drawing is a reproduction of the Original on a reduced scale.]

FIG. 1

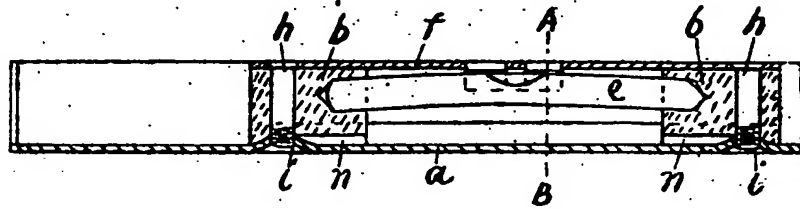


FIG. 2

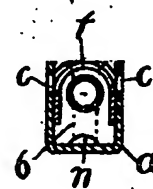


FIG. 3

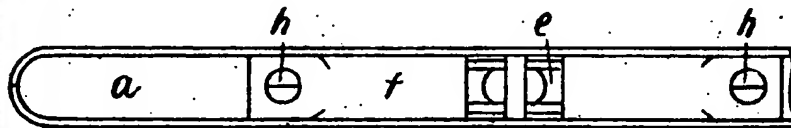


FIG. 4

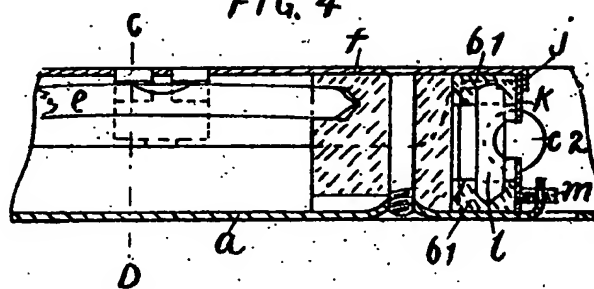


FIG. 5

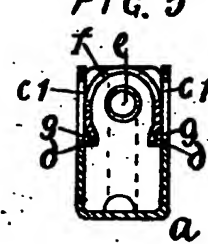
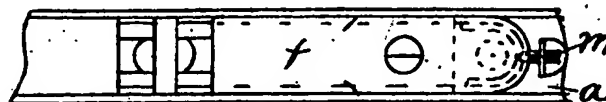


FIG. 6



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